



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,842	02/23/2004	Adela Mora-Gutierrez	017575.0924 (TAMUS 1492)	1473
29335	7590	07/18/2005	EXAMINER	
ROSENBAUM & ASSOCIATES, P.C. 650 DUNDEE ROAD SUITE 380 NORTHBROOK, IL 60062-2757			ANTHONY, JOSEPH DAVID	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/784,842

Applicant(s)

MORA-GUTIERREZ ET AL.

Examiner

Joseph D. Anthony

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 14-18, 20 and 42-66 is/are pending in the application.  
4a) Of the above claim(s) 45-64 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-12, 14-18, 20, 42-44, 65 and 66 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**FINAL REJECTION**

***Election/Restrictions***

1. Newly submitted claims 45-64 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: 1) Claims 45-53 are drawn to emulsion type compositions which are dependent on independent claim 21 which was the independent claim of Group II claims which were **not elected** without traverse by Michelle M. Lecointe on 09/20/04. Furthermore, independent claim 21 has now been canceled by applicant's amendment of 04/28/05., and 2) Claims 54-64 are all drawn to a composition comprising at least one polysaccharide complex which is patentable distinct from the elected compositions which now has been amended to require at least one casein or fragment thereof. There is absolutely no requirement for said casein component in new independent claim 54, as there is no requirement for said polysaccharide complex in independent claim 1.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 45-66 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1714

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6-7, 9, 16-18, 20, 42-44, and 65-66 are rejected under 35 U.S.C. 102(b) as being anticipated by KAHN et al. U.S. Patent Number 4,421,778.

Kahn et al teaches freezer stable whipped ice cream and milk shake food products, see abstract, column 4, line 10 to column 5, line 56 and claim 12. Applicants' claims are deemed to be anticipated over examples 1-2 which comprise in part: nonfat dry milk (a source of casein, casein comprises phosphopeptides), sucrose (a non-reducing sugar), Seakem C= calcium carrageenan (comprises sulfated polysaccharide), D-23-A (a source of Dutch cocoa powder, soybean and coconut oils (sources of highly unsaturated oils), etc..

5. Claims 4-5, 8, and 10-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious KAHN et al. U.S. Patent Number 4,421,778.

Kahn et al has been described above and applicants' claims are deemed to be

Art Unit: 1714

anticipated over Examples 1-2. In the alternative, Kahn may differ from applicants' claimed invention in the following ways: 1) it is unclear if Examples 1-2 have medium-chain triglycerides, and 2) it is unclear if the casein component used in examples 1-2 encompasses applicants' claimed casein components..

It would have been obvious to one having ordinary skill in the art to use the medium-chain triglycerides in the food emulsions taught by Kahn et al since such medium-chain triglycerides are deemed to be a component found within soybean oils and/or coconut oils. In any case medium-chain triglycerides are well known fats used in all sorts of edible food emulsions in the art. Finally, applicants' claimed casein type components are deemed to be obvious over the disclosure of Kahn et al because such caseins are known components of milk and would thus be obvious to use in Kahn et al's freezer stable whipped ice cream and milk shake food products.

6. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAHN et al. U.S. Patent Number 4,421,778 in view of MUSHER U.S. Patent Number 2,282,815.

Kahn et al. have been described above. Kahn et al differ from applicant's claimed invention in that there is no direct disclosure to the further addition of phospholipids such as lecithin.

Musher teaches stabilization of food type water and oil emulsions containing highly unsaturated oils by using the following stabilization systems: 1) a sugar (e.g. sucrose, maltose, lactose), 2) non-aromatic nitrogen compounds

Art Unit: 1714

such as casein (which comprises phosphopeptide units) or gelatin (which comprises phosphopeptide units), and/or 3) phosphatide = phospholipids (e.g. lecithin and cephaline), and 4) optional other adjuvents, see page 1, column 1, lines 1-55 and page 1, column 2, lines 1-37, and page 3, column 2, lines 34-70.

It would have been obvious to one having ordinary skill in the art to use the direct disclosure of Musher to the preferable addition of phospholipids, such as lecithin, as stabilizers for unsaturated glycerides, as strong motivation to actually add lecithin as an additional stabilizing component to the compositions taught by Kahn et al..

7. Claims 1-3, 6-7, 9, 14, 16-18, 20, 42-44 and 65-66 are rejected under 35 U.S.C. 102(b) as being anticipated by DEMICHELE et al. U.S. Patent Number 5,223,285.

Demichele et al teach nutritional food products for pulmonary patients in the form of emulsions that contain highly unsaturated oils and other components such as non-reducing sugars (e.g. sucrose), acid casein and calcium caseinate (both comprise phosphopeptides), lecithin (comprises phospholipids), carrageenans (which comprise sulfated polysaccharides) etc., see abstract, column 16, line 56 to column 17, line 61.

Applicants' claims are deemed to be anticipated over the compositions set forth in Table

8.

Art Unit: 1714

8. Claims 4-5, 8, 10-12, and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over DEMICHELE et al. U.S. Patent Number 5,223,285.

Demichele et al has been described above and applicant's claims are deemed to be anticipated over Table 8. In the alternative, Demichele et al may differ from applicants' claimed invention in the following ways: 1) it is unclear if the composition in Table 8 have medium-chain triglycerides, 2) it is unclear if the acid casein and calcium caseinate components overlap applicants' claimed casein components of claims 7-8, and 3) it is unclear if Table 8 teaches the use of phospholipids derived from egg yolks or soybeans as set forth in applicants' claim 15.

It would have been obvious to one having ordinary skill in the art to use the medium-chain triglycerides in the food emulsions taught by Demichele et al since such medium-chain triglycerides are deemed to be a component found within Borage oil, fish oil, MCT oil, and/or Canola oil used in Table 8. In any case medium-chain triglycerides are well known fats used in all sorts of edible food emulsions in the art. It would also have been obvious to one having ordinary skill in the art to use casein additives that read on applicant's claimed casein components since such are encompassed by the broad disclosure of the patent. In any case, a well known source of casein is milk which comprised applicant's claimed casein components to one degree or another. Whether or not, Table 8 teaches the use of phospholipides derived from egg yolks or soybeans, it would have been obvious to use such sources since they are deemed come within the broad disclosure of the patent. In any case, such is deemed to be moot since applicants'

Art Unit: 1714

claims are not directed to the source of producing the individual components that make up the composition. Furthermore, the use of citric acid in lue of or in combination with, sodium citrate is deemed to be well within the disclosure of the patent.

9. Claims 1, 6-9, 14, 16-18, 20, 42-44, and 65-66 are rejected under 35 U.S.C. 102(b) as being anticipated by MUSHER U.S. Patent Number 2,282,815.

Musher teaches stabilization of food type water and oil emulsions containing highly unsaturated oils by using the following stabilization systems: 1) a sugar (e.g. sucrose, maltose, lactose), 2) non-aromatic nitrogen compounds such as casein (which comprises phosphopeptide units) or gelatin (which comprises phosphopeptide units), and/or 3) phosphatide = phospholipids (e.g. lecithin and cephaline), and 4) optional other adjuvants, see page 1, column 1, lines 1-55 and page 1, column 2, lines 1-37, and page 3, column 2, lines 34-70.

10. Claims 4-5, 10-12 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over MUSHER U.S. Patent Number 2,282,815 optionally in view of BUIKSTRA et al. U.S. Patent Number 5,650,190 for claims 4-5 only.

Musher et al has been described above and is deemed to anticipate applicants' claims for the same reasons claims 1, 6-9, 14, 16-18, 20 and 42-44 are anticipated. In the alternative, it is unclear from the Musher reference: 1) if the triglycerides used in the examples actually contain medium-chain triglycerides, and 2) if the phospholipids

Art Unit: 1714

supplied by the lecithin component actually come from egg yolks or soybeans or are from another source.

It would have been obvious for one having ordinary skill in the art to actually use medium-chain triglycerides in Musher's emulsions since they are deemed to come within the broad disclosure of the patent to the use of oils that contain triglycerides, are so well known in the art, and optionally in view of Buiskstra et al who teaches heat stabilized food oil-in-water emulsions of unsaturated oils that comprise medium-chain triglycerides, see abstract, column 3, lines 40-45 and example 6. It would also have been obvious to one having ordinary skill in the art to use phospholipids derived from egg yolks or soybeans since sources for phospholipids are extremely well known in the art, and are deemed to be obvious over Musher's disclosure in column 2, lines 25-32. In any case, applicant has not shown that the source of the phospholipids imparts a patentable distinction.

11. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over MUSHER U.S. Patent Number 2,282,815 in view of DEMICHELE et al. U.S. Patent Number 5,223,285 or KAHN et al. U.S. Patent Number 4,421,778.

Musher has been described above and differs from applicant's claimed invention in that there is no direct disclosure to the further addition of sulfated polysaccharides.

Demichele et al and Kahn et al both teach food products in the form of emulsions that contain highly unsaturated oils and other components such as non-reducing sugars (e.g. sucrose), casein, lecithin, carrageenans (which comprise sulfated polysaccharides)

etc., see Table 8 of Demichele et al. and Examples 1-2 of Kahn et al..

It would have been obvious to one having ordinary skill in the art to add carrageenans (which comprise sulfated polysaccharides) to Musher's emulsions since such an additive is directly taught to be a well known additive to food type emulsions as taught by Demichele et al and Kahn et al..

### ***Claim Objections***

12. Claims 9-12 and 65 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 9-12 and 65 are not further limiting when claim 1 further comprises just a phosphopeptide because the casein or fragment thereof component of claim 1, is itself is a phosphopeptide.

### ***Response to Arguments***

13. Applicant's arguments filed 04/28/05 with the amendment have been fully considered but are not persuasive to put the application in condition for allowance for the reasons set forth above. Additional examiner comments are found next. Applicant's arguments against the applied references are total rejected by the examiner. In the first place applicant seems to have no idea what the scope of applicant's pending claims 1 and 42 are. Applicant's independent claim 1 is a composition claim that must comprise

Art Unit: 1714

at least one casein or fragment thereof. The composition does not have to be in the form of any emulsion since the phrase "is operable to inhibit oxidation of lipids in oil-in-water or water-in-oil emulsions" is only an intended use phrase. Furthermore, applicant's independent claim 1 uses the open claim language of "comprising" which opens up the claim to all additional components. The same is also true for applicant's independent claim 42.

Applicant's arguments that Musher et al fails to provide a method of stabilizing without heating to a temperature in excess of 250 °F is totally irrelevant because, applicant's claims are drawn to a composition and not to a method of making the composition. Furthermore the fact that Musher et al. makes no direct distinction between reducing sugars and non-reducing sugars is totally irrelevant because Mosher et al teaches the optional use of either type of sugars, and applicant's claims have no limitation at all that forbids the inclusion of reducing sugars.

Applicant's argues that Demichele et al fails to disclose oxidative stability during oil processing or shelf life storage stability, and fails to suggest any purpose of the acid casein slurry beyond pH adjustment and protein source. Such arguments of applicant's are totally irrelevant because applicant claims are drawn to a composition that is directly met by the disclosure of Demichele et al. Applicant is reminded that the mere difference in reason for adding a material to another is not a patentable difference, see *In re Lintner* 485 F.2d 1013 173 USPQ 560 (CCPA 1972).

Applicant's argument against the Kahn et al patent as set forth on the bridging paragraph between the bottom of page 12 and the top of page 13 of the REMARKS section of the amendment, are so totally false that it is not worth the examiner arguing against. Applicant representative is advised to read the Kahn et al patent, especially the cited sections by the examiner to see that everything the examiner said the patent teaches it in fact does teach. Once again the reasons that Kahn et al had for adding the individually components to their compositions is totally irrelevant as long as the disclosed compositions met the limitation of applicant's claimed compositions claims.

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

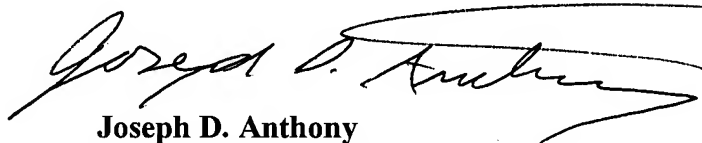
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1714

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Examiner Information***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The centralized FAX machine number is (571) 273-8300. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.



**Joseph D. Anthony  
Primary Patent Examiner  
Art Unit 1714**

7/13/05